



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
11 TECHNOLOGY DRIVE, NO. CHELMSFORD, MA 01863**

Inspection Report

Date: July 16, 2012

Subject: Champlainside Farm, Concentrated Animal Feeding Operation (CAFO)
Inspection

EPA Inspector(s): Lisa Thuot – Compliance Inspector (OEME)
Diane Boisclair – Compliance Inspector (OES)

State of Vermont Representative(s): Nate Sands, VT Agency of Agriculture

Facility Information:

Name/Location: Champlainside Farm
801 Lake Street
Bridport, VT 05734

Permit No.: N/A

Facility Representative(s): (b) (6)(b) (6), Owner

Background Information:

Date of Inspection: April 19, 2012

Weather Conditions: Sunny, dry, approximately 55°F

Purpose of Inspection:

The purpose of the inspection was to assess applicability of and compliance with the CAFO requirements under the Clean Water Act at 40 C.F.R. Part 122.23.

Entry Procedures

The inspection was announced approximately 48 hours in advance by telephone to the owner, Mr. (b) (6). Upon arrival at the farm, EPA inspectors presented their credentials to Mr. (b) (6). Mr. (b) (6) provided inspectors with a visitor's information and fact sheet about the farm, entitled "Today at Champlainside Farm". Mr. (b) (6) explained there are various improvement projects at the farm which were recently completed, in progress, and/or planned.

Inspection Observations and Findings

The farm is a dairy operation with approximately 530 milking cows and 499 youngstock. The farm is classified as a medium farm operation (MFO) according to the VT Agency of Agriculture. Mr. (b) (6) has been running farm operations for about 5 years, but noted the farm has been owned by his family for over a decade. The milk produced at the farm is sold to AgriMark. The farm has a nutrient management plan (NMP) through Farm Compliance Services Inc. During the inspection, there was a copy of the 2009 NMP available, but Mr. (b) (6) could not locate the updated version. Mr. Sands and Mr. (b) (6) confirmed there are updated NMPs for 2010-2011 on file. Town water supply is piped into the barns for animal drinking water. Animal mortalities are composted in an area on-site.

The farm has two manure pits located next to each other on the property. The newest pit, a shallow concrete pit installed in 2011, separates sand and solids from the liquid manure, which overflows to the larger main pit. Sand is now used for bedding material. Mr. (b) (6) said a new cement ramp will be built to make it easier to scrape manure from the main barn. There are plans to build two new satellite clay-lined manure pits near land application areas. Each new pit will be located about one mile away from the farm. The new pits will increase annual manure storage capacity to approximately 3 million gallons.

At the heifer barn, a new PVC stand pipe was installed below the roof to capture and divert clean roof water from the heifer barnyard (picture #1). Mr. (b) (6) noted the frequency of scraping manure from the heifer barn was increased to reduce the amount of manure exposed to the elements. A path from the heifer barn leads out to an adjacent open exercise lot/pasture (pictures #2-3). Mr. (b) (6) said some heifers use this pasture unless it is extremely wet, which is common during years of normal rainfall amounts. New electric fencing was installed around the exercise lot/pasture to prevent animal access to Lake Champlain. Runoff from a portion of the heifer barnyard flows south into a natural drainage swale that flows west and discharges into Lake Champlain. There is a small cement pit at the edge of the barnyard to funnel runoff and trap solids; during the inspection dried manure/solids were observed beyond the cement pit on the grassy slope which leads to the drainage swale (pictures #4-5).

Wastewater from the milk house parlor is directed to an outside sump/pit, and is pumped to the manure pit. The pump was installed in about 1995. If the float and/or pump fail, milk parlor wastewater can overflow from the sump/pit through a PVC pipe and discharge to the natural drainage swale to Lake Champlain described above (pictures #6-8). A corrugated pipe below the milk pit overflow pipe collects drainage from a residential area on Lake St. No overflow

discharge from the milk pit was occurring during inspection. Mr. (b) (6) said the overflow pipe could be closed off/plugged. The area behind the milking barn contained an accumulation of water and manure solids in a culvert ditch that flows to the natural drainage swale to Lake Champlain (picture #9). Mr. (b) (6) said the area behind the milking barn will be reconstructed with concrete in the summer of 2012, including a new ramp, to eliminate the runoff of solids, etc.

On the southeast side of the farm, silage is stored in bunkers on concrete pads. Runoff from this silage area enters a vegetated drainage ditch that flows south and west around the dry cow barn. The drainage ditch spreads into an open, grassy field which borders Lake Champlain, just south of the dry cow barn (pictures #10-11). Mr. (b) (6) said a new silage collection system would be installed in summer 2012 to direct silage runoff to the manure pit. A second vegetated drainage ditch in the grassy field was observed about 75 feet away, which flows west toward Lake Champlain. Water was flowing into the ditch from a 6 inch corrugated pipe, which Mr. (b) (6) said is connected to tile drains in the adjacent fields. EPA inspectors tested the discharge from the 6 inch discharge pipe with a field testing kit, as follows: the pH was 6 S.U., the ammonia was 0 ppm, nitrate-nitrogen was between 2 and 5 ppm, and nitrite-nitrogen was between 0.15 and 0.3 ppm.

An exit briefing was conducted with Mr. (b) (6) at the end of the inspection, with Mr. Sands present.

Enclosures/Attachments:

Inspection Pictures